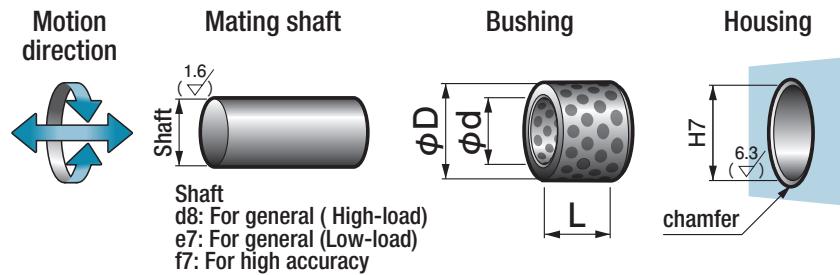




Specify Part No. by required I.D., O.D. and Length.
(e.g.) I.D. is 25mm, O.D. is 33mm, and length is 20mm.

SPB - 253320
Part No.



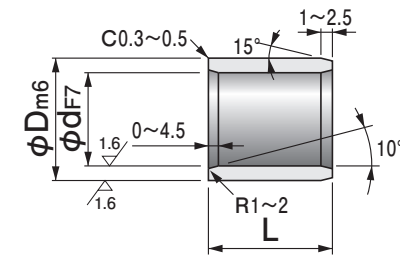
All SPB bushings have engraved **OILES** mark.

I.D.		O.D.		Length L							Tolerance	
φd	Tolerance	φD	Tolerance	8	10	12	15	16	19	20	25	
6	+0.022 +0.010	10	+0.015 +0.006	061008	061010	061012						
8	+0.028 +0.013	12	+0.018 +0.007	081208	081210	081212	081215					
10	+0.028 +0.013	14	+0.018 +0.007	101408	101410	101412	101415			101420		
12	+0.034 +0.016	18	+0.018 +0.007	121808	121810	121812	121815	121816	121819	121820	121825	
13	+0.034 +0.016	19	+0.021 +0.008		131910	131912	131915			131920	131925	
14	+0.034 +0.016	20	+0.021 +0.008		142010	142012	142015			142020	142025	
15	+0.034 +0.016	21	+0.021 +0.008		152110	152112	152115	152116		152120	152125	
16	+0.034 +0.016	22	+0.021 +0.008		162210	162212	162215	162216	162219	162220	162225	
17	+0.034 +0.016	23	+0.021 +0.008				172315					
18	+0.034 +0.016	24	+0.021 +0.008		182410	182412	182415	182416		182420	182425	
19	+0.041 +0.020	26	+0.021 +0.008				192615			192620		
20	+0.041 +0.020	28	+0.021 +0.008		202810	202812	202815	202816	202819	202820	202825	
20	+0.041 +0.020	30	+0.021 +0.008		203010	203012	203015	203016		203020	203025	
22	+0.041 +0.020	32	+0.025 +0.009			223212	223215			223220	223225	
25	+0.041 +0.020	33	+0.025 +0.009			253312	253315	253316		253320	253325	
25	+0.041 +0.020	35	+0.025 +0.009			253512	253515	253516		253520	253525	
28	+0.041 +0.020	38	+0.025 +0.009							283820	283825	
30	+0.041 +0.020	38	+0.025 +0.009			303812	303815			303820	303825	
30	+0.041 +0.020	40	+0.025 +0.009			304012	304015			304020	304025	
31.5	+0.050 +0.025	40	+0.025 +0.009									
32	+0.050 +0.025	42	+0.025 +0.009							324220		
35	+0.050 +0.025	44	+0.025 +0.009							354420	354425	
35	+0.050 +0.025	45	+0.025 +0.009							354520	354525	
38	+0.050 +0.025	48	+0.025 +0.009									
40	+0.050 +0.025	50	+0.025 +0.009				405015			405020	405025	
40	+0.050 +0.025	55	+0.030 +0.011				405515					
45	+0.050 +0.025	55	+0.030 +0.011									
45	+0.050 +0.025	56	+0.030 +0.011									
45	+0.050 +0.025	60	+0.030 +0.011									

※The I.D. tolerance after press fitting is for reference only.

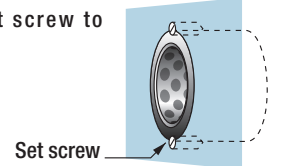
※I.D. $\phi 50 \sim \phi 200$ are shown on pages 189 to 190.

▲ The dimensional tolerances are the values measured at +25°C.

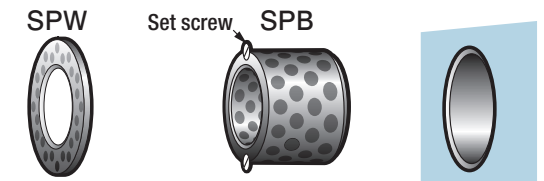


- Applicable to rotation, oscillation, and reciprocating motion.
- Do not use this under water.
- 31.5mm I.D. bushing can be used as an intermediate trunnion bushing for hydraulic cylinders.

It is recommended to use a set screw to prevent dislocation.



Use this product together with the Oiles #500SP washer (SPW shown on page 197) in a position where thrust loads are applied.



※Be sure to determine the position with a countersunk head screw and fix when the SPW with ★ shown in the table below is used, since the inner diameter is larger than the shaft diameter.

Length L							Tolerance		I.D. tolerance after press fitting (reference)	Washer		I.D.
30	35	40	50	60	70	80				SPW	φd	
									+0.019 +0.007	0603	6	
									+0.025 +0.010	0803	8	
									+0.025 +0.010	1003	10	
121830									+0.031 +0.013	1203	12	
131930									+0.030 +0.012	1303	13	
142030									+0.030 +0.012	1403	14	
152130	152135	152140							+0.030 +0.012	1503	15	
162230	162235	162240							+0.030 +0.012	1603	16	
									+0.030 +0.012	1803★	17	
182430	182435	182440							+0.030 +0.012	1803	18	
									+0.037 +0.016	2005★	19	
202830	202835	202840	202850						+0.037 +0.016	2005	20	
203030	203035	203040	203050						+0.037 +0.016	2505★	20	
									+0.037 +0.016	2505★	22	
253330	253335	253340	253350	253360					+0.037 +0.016	2505	25	
253530	253535	253540	253550	253560					+0.037 +0.016	3005★	25	
283830		283840							+0.037 +0.016	3005★	28	
303830	303835	303840	303850	303860					+0.037 +0.016	3005	30	
304030	304035	304040	304050	304060					+0.037 +0.016	3505★	30	
314030		314040							+0.046 +0.021	3505★	31.5	
324230		324240							+0.046 +0.021	3505★	32	
354430	354435	354440	354450	354460					+0.046 +0.021	3505	35	
354530	354535	354540	354550	354560					+0.046 +0.021	4007★	35	
		384840							+0.046 +0.021	4007★	38	
405030	405035	405040	405050	405060	405070	405080			+0.046 +0.021	4007	40	
405530	405535	405540	405550	405560					+0.045 +0.020	4507★	40	
455530	455535	455540	455550	455560					+0.045 +0.020	4507	45	
455630	455635	455640	455650	455660					+0.045 +0.020	4507	45	
456030	456035	456040	456050	456060	456070	456080			+0.045 +0.020	4507	45	